Serial No.: 10/568,707 Filed: December 14, 2006

Office Action Mailing Date: August 20, 2009

Examiner: PARKIN Jeffrey S. Group Art Unit: 1648 Attorney Docket: 31570

Confirmation No.: 3267

# **Amendments to the Drawings:**

Attached are four annotated sheets of drawings with amendments to Figures 1a, 2a, 2b, 2c, 9a and 10, as required by the Examiner. Formal versions of Figures 2c and 11 are also attached herewith. A complete set of 25 replacement drawings are included herewith.

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### **REMARKS**

Reconsideration of the above-identified application in view of the amendments above and the remarks following is respectfully requested.

Claims 90-99 are in this Application. Claims 90-99 have been rejected under 35 U.S.C. § 122. Claims 91, 94 have been canceled herewith. Claims 90 and 98 have been amended herewith.

## **Amendments To The Specification**

## 37 C.F.R. § 1.821-1.825

The Examiner states that the application fails to comply with the requirement of sequence disclosures. Specifically, the Examiner states that sequences appearing on Pages 4, 10 and 65 as well as on drawings 1A, 9A and 10 must have appropriate sequence identifiers.

The specification has now been amended as requested by the Examiner. Of note, Applicants have not identified any sequence identifier which should be introduced to page 4. Applicant attaches herewith a replacement nucleotide and/or amino acid listing in paper and computer readable form (CRF), which includes SEQ ID NOs. 1-63. All added sequences are supported by the application as filed, since the complete human sequence of Tal (SEQ ID NO: 2) and Tsg101 (GenBank Accession No: BC009239, as well as nucleic acid coordinate and amplification primers) were included in the application as filed.

#### Statement

The content of the paper and computer readable form (CRF) of the replacement Sequence Listing includes no new matter.

#### Amendments To The Claims

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### 35 U.S.C. § 112 Rejections

The Examiner rejected claims 90-99 under 35 U.S.C., first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Specifically, the Examiner states that the instant specification fails to teach the molecular determinants modulating Tal activity, therefore the skilled artisan would reasonably conclude that Applicants were not in possession of the claimed invention at the time of filing.

Examiner's rejection is respectfully traversed.

In fact the present application provides structure function analysis of the minimal portion of Tal which is required for inhibiting HIV budding. Example 8 of the instant application describes the following; budding of the HIV-1 Gag is dependent on active Tsg101 complexes, therefore sequestering Tsg101 from HIV-1 Gag inhibits budding. Since Tsg101 binds more effectively to a double PTAP motif, the two adjacent PTAP-PSAP motifs of Tal were included in a GFP-fusion peptide (SEQ ID NO: 51) and examined for HIV budding inhibition. As shown in Figure 9b, this minimal portion of Tal completely blocked HIV-1 Gag budding as compared to control expessing HIV-1 Gag along with a GFP empty vector. These results substantiate the minimal portion of Tal having the PTAP-PSAP motif, as a valuable anti HIV therapeutic tool.

Thus it is clear, that not only does the present specification teach Tal (SEQ ID NO: 2) as an anti-HIV agent but also the minimal portion corresponding to SEQ ID NO: 37 (PSAP-PTAP motif) for inhibiting viral budding.

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In order to expedite prosecution of this case, Applicants have elected to amend claim 90 to describe this minimal portion, thus providing structural-functional metes and bounds for the claimed agents.

Withdrawal of the rejection is respectfully requested.

# Amendments to the Drawings

## 37 C.F.R. § 1.84

Attached are four annotated sheets of drawings with amendments to Figures 1a, 2a, 2b, 2c, 9a and 10, as required by the Examiner. Formal versions of Figures 2c and 11 are also attached herewith. A complete set of 25 replacement drawings are included herewith.

In view of the above amendments and remarks it is respectfully submitted that claims 90, 92-93, 95-99 are now in condition for allowance. A prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,

March O. Monito

Martin D. Moynihan Registration No. 40,338

Date: December 22, 2009

#### Enclosures:

- Petition for Extension (One Month)
- Letter to Chief Draftsman
- Annotated Drawing Sheets (4 sheets)
- Formal Drawing Transmittal Sheet
- Complete Set of Replacement Drawing Sheets (25 sheets)
- Replacement Sequence Listing (Written Paper Form and CRF)